UNIVERSITI TEKNOLOGI MARA
EDU540: INTRODUCTION TO RESEARCH METHODOLOGY

Course Name (English)	INTRODUCTION TO RESEARCH METHODOLOGY `APPROVED`
Course Code	EDU540

MQF Credit	3

Course Description	This course, the first in a series of two, introduces students to the concepts and philosophies underlying academic research and the scientific method. It aims at developing the students' understanding of research methodologies and their place in social science research. Students will also develop an understanding of the main research methods, designs of research and the actual conduct of research, including issues of ethics and access. Students will be in a position to define their research problem and draw up a proposal upon completion of this course.

Transferable Skills	skills in planning to conduct research

Teaching Methodologies	Lectures, Inquiry-based Learning, Case Study, Practical Classes, Tutorial, Web Based Learning, Discussion, Presentation, Small Group Sessions , Journal/Article Critique

CLO	CLO1	Analyze various types of research approaches, designs, sampling techniques and essential elements in educational research.
	CLO2	Evaluate the pertinent elements of a research
	CLO3	Prepare a research proposal that addresses an appropriate research problem with proper background, assumptions, delimitations, literature review and methodology

Pre-Requisite Courses	No course recommendations

Topics
1. Introduction to Research 1.1) Concept and purpose of research 1.2) 3 inquiry methods in research 1.3) Types: Basic vs Applied research 1.4) Approaches: Quantitative, Qualitative and Mixed-methods
2. Foundations of research 2.1) Research area and topic 2.2) Defining a research problem 2.3) Research objectives 2.4) Research questions 2.5) Research Hypotheses 2.6) Definitions of terms 2.7) Limitations and delimitations
3. Literature review 3.1) Purpose of literature review 3.2) Elements of a literature review 3.3) Locating literature
4. Research Designs for Quantitative Approach 4.1) Survey 4.2) Experimental 4.3) Correlational 4.4) Causal Comparative

5. Research Designs for Qualitative Approach
5.1) Phenomenology
5.2) Grounded Theory
5.3) Ethnography
5.4) Case Study
5.5) Action Research

6. Population and Sampling
6.1) Sample and sample size
6.2) Random/Probability Sampling
6.3) Non-random / Non-probability sampling

7. Research Variables
7.1) Independent
7.2) Dependent
7.3) Moderating
7.4) Intervening

8. Data Collection Techniques
8.1) Questionnaire
8.2) Interview
8.3) Observation
8.4) Document review

9. Reliability, Validity and Ethics in Research
9.1) Reliability and validity in quantitative research
9.2) Reliability and validity in quantitative research
9.3) Ethical issues

10. Discussion on Research Intention 1
10.1) Individual presentation
10.2) Feedback

11. Discussion on Research Intention 2
11.1) Individual presentation
11.2) Feedback

12. Analysis and presentation of Quantitative Data
12.1) Descriptive statistics

13. Analysis and presentation of Qualitative Data
13.1) Organizing data
13.2) Transcribing data
13.3) Coding for main ideas and themes

14. Writing a Research Proposal
14.1) Contents of a research proposal
14.2) Citations and references

Assessment Breakdown	%
Continuous Assessment	100.00%

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Final Project	Research proposal	50%	CLO3
	Journal/Article Critique	Academic Exercise review/critique	20%	CLO2
	Test	Students Answer the open book test individually	30%	CLO1

Reading List	Recommended Text	**Chua Yan Piaw 2016, *Mastering research methods*, 2nd Edition Ed., Malaysia:McGraw-Hill**
		Parmjit Singh, Gurnam Kaur & Chan Yuen Fook 2006, *A comprehensive guide to writing a research proposal*, Malaysia: Venton
	Reference Book Resources	**Fraenkel, J.R., Wallen, N.E. & Hyun, H.H. 2012, *How to design and evaluate research in education (8th edition)*, New York: McGraw-Hill.**
		Holmes, R., Hazadiah Mohd Dahan & Habibah Ashari 2005, *A guide to research in the social sciences*, Malaysia: Prentice Hall
		Murray-Thomas, R. 2005, *Teachers doing research: An introductory guid*, Ed., , Boston: Pearson Education [ISBN:]
		Denscombe, M. 2003, *The good research guide*, 2 Ed., , Great Britain: Bell & Bain Ltd [ISBN:]
		Gay, L. R. & Airasian, P. 2003, *Educational research: Competencies for analys*, Ed., , Upper Saddle River: Merrill Prentice Hall [ISBN:]
Article/Paper List	This Course does not have any article/paper resources	
Other References	This Course does not have any other resources	